

10. The polyurethane layer according to claim 8, characterized by having a thin layer of polyurethane towards the outer surface which contains non-expanded or no hollow spheres.
11. The polyurethane layer according to claim 8, characterized in that said expanded hollow spheres have diameters of from 20 to 100 μm , preferably from 30 to 50 μm .
12. The polyurethane layer according to claim 10, characterized in that said non-expanded hollow spheres have diameters of from 6 to 16 μm , preferably from 6 to 9 μm .
13. The polyurethane layer according to claim 8, characterized in that the inner surface of the polyurethane layer is in contact with a carrier made of metal or plastic.
14. A method for the preparation of a compressible polyurethane layer having outer and inner surfaces on or for rotation-symmetrical bodies according to claim 8, characterized in that a freshly prepared mixture of diisocyanate and polyol or polyamine is applied by rotational casting to a roller-shaped carrier, one or both of the two components containing said expanded and optionally the non-expanded hollow spheres, followed, if desired, by withdrawing the polyurethane layer from the carrier and, if desired, by cutting it open.